



**Appendix to Amendment  
U.S. Application No. 09/402,751  
Filed: October 12, 1999**

1. (Once Amended) An illumination unit for point illumination of a medium comprising a plurality of light emitters [(3) in the form of] comprised of light guides arranged to illuminate an illumination face via a light valve arrangement[, said light valve arrangement] comprising a plurality of electrically controlled light valves, [characterized in that] each of at least two of the light emitters [(3) are] being arranged to illuminate a plurality of light valves [(6) each].

2. (Once Amended) An illumination unit according to claim 1, [characterized in that it additionally comprises] further comprising a first lens arrangement[, said lens arrangement] comprising at least one micro lens arranged with respect to each light valve so that the light emitted by the light [emitter or] emitters is focused on or in the vicinity of the optical axis of the individual light valves.

3. (Twice Amended) An illumination unit according to claim 1, [characterized in that it additionally comprises] further comprising a [second] micro lens [arrangement] arranged between the light valves and the illumination face, so that light transmitted through [the] a light channel of [the] an individual light valve is [suitably] focused on the illumination face [(5)].

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4. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein the optical light [guide or] guides (3) are formed by] comprises optical fibres[, preferably multimode fibres].

5. (Twice Amended) An illumination unit according to claim 1, [characterized in that] further comprising at least one [of the] light [sources (1) is formed by] source comprising a short arc gap lamp.

6. (Twice Amended) An illumination unit according to claim [1] 5, [characterized in that] wherein the [light source comprises a] short arc gap lamp [(1) having] comprises light receiving optical light guides or fibres [(3) which are] arranged within an angle of +/- 75° with respect to the [equator] equatorial axis of the lamp on a ball face around the lamp, and [which are] optically connected to and conduct light to the light emitters.

7. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein said at least one [of the] light [sources] source [is formed by] comprises a laser source.

8. (Twice Amended) An illumination unit according to claim 1, [characterized in that it comprises a plurality of light emitters (3) in the form] wherein each of the light guides[, each of which] is optically connected to a light source [(1)] arranged to illuminate a plurality of the light valves [(6)] arranged in a

given face shape, and further comprising at least one collimation lens [being] arranged between the light emitter and the face shape so that collimated light is conducted to a first micro lens arrangement associated with the plurality of light valves.

9. (Once Amended) An illumination unit according to claim 8, [characterized in that] wherein the face shape of the light valves forms one or more hexagons.

10. (Twice Amended) An illumination unit according to claim 8, [characterized in that] wherein the individual light valves are arranged in rows in [the] a transverse direction [(9)] of the face shape [with], the light valves being disposed at a given mutual distance, and [that] the rows [are] being mutually offset in the transverse direction.

11. (Twice Amended) An illumination unit according to claim 8, [characterized in that] wherein the rows are arranged such that the projection of all the individual light valves in the transverse direction [(9)] in the face shape results in a plurality of illumination points at a mutual distance in the transverse direction [(9)].

12. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein [the] a face shape [or shapes] of the light valves

[are] is arranged on one or more illumination heads, each illumination head and the illumination face being adapted to perform a relative movement across an illumination area, [said device being also provided with] and further comprising a control unit for controlling the light valves in dependence on the relative movement between the illumination head and the illumination face.

13. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein the illumination head [or heads constitute] comprises a rod [whose] movable relative [movement with] to the illumination face [is] in a single progressing movement [in the] transverse to the direction of the rod.

14. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein the illumination unit between the light valve arrangement and the illumination face additionally comprises optical means for spreading the light beams emitted by the light channels across the illumination face.

15. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein the light valves of the illumination unit are formed by electrooptically based light valves [spatial light modulators], [such as] comprising one of LCD, PDLC, PLZT, FELCD or Kerr cells.

16. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein the light valves of the illumination unit are formed by reflection based electromechanical light valves[, such as DMD].

17. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein the light valves of the illumination unit are formed by transmission based electromechanical light valves.

18. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein the light guides of the illumination unit are so arranged with respect to the light valve arrangement that the optical energy fed to [each] a subset of light valves does not differ significantly from each other when the subsets of light valves illuminate adjacent areas or areas close to each other on the illumination face.

19. (Twice Amended) An illumination unit according to claim 1, [characterized in that] wherein [the] light receiving ends of the light guides are gathered in at least one bundle which directly or indirectly receives light from a reflector or a reflector system optically connected to at least one lamp.

20. (Once Amended) A method of point illumination of a medium by means of a plurality of light [emitters (3) in the form of] emitting light guides [which are] arranged to illuminate an illumination face via a light valve

arrangement, said light valve arrangement comprising a plurality of electrically controlled light valves, [characterized in that at least two of the light emitters (3) are arranged to illuminate a plurality of light valves [(6) each] comprising illuminating a plurality of light valves with each of at least two of the light emitters.

21. (Once Amended) A method according to claim 20, [characterized in that] including focusing the light emitted by the light emitter [or emitters is focused] on or in the vicinity of the optical axis of the individual light valves via a [first lens arrangement, said] lens arrangement comprising at least one micro lens arranged with respect to each light valve.

22. (Twice Amended) A method according to claim [20] 21, [characterized in that] including focusing the light transmitted through the light channel of the individual light valve [is suitably focused] on the illumination face [(5)] via a second micro lens arrangement arranged between the light valves and the illumination face.